

APHIS Site Visit Report – Republic of Lithuania
CSF, SVD and FMD Status Evaluations
November 8-11, 2004

Introduction

APHIS conducted this site visit to complement and verify information previously provided by Lithuania in support of a request to be considered free of classical swine fever (CSF), swine vesicular disease (SVD), and foot and mouth disease (FMD). The site visit team met with Lithuanian veterinary officials at the central State Food and Veterinary Services (SFVS) offices on the first day and on subsequent days visited selected elements of the veterinary and animal health infrastructure, including county and district veterinary offices, two border inspection points, and both cattle and swine operations. The composition of the team was as follows:

Kelly Rhodes	Veterinary Medical Officer Regionalization Evaluation Services, APHIS
Tom Kasari	Veterinary Medical Officer/Senior Analyst Risk Analysis Team, CEAH, VS, APHIS
Jay Mitchell	Director for Trade Policy Trade Support Team, IS, APHIS
Xavier Mennig	Agricultural Specialist, IS, APHIS
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The site visit team visited county/district veterinary offices in Alytus and Kaunas, the road border inspection post (BIP) with Belarus at Medininkai, and the airport BIP in Vilnius. The team also visited a large swine operation, a large dairy operation, and a mid-sized beef cattle operation. As part of this joint U.S./Canadian effort, Dr. John Pasick from the Canadian Food Inspection Agency visited the National Veterinary Laboratory (NVL) in Vilnius.

Lithuania is primarily interested in exporting specialty sausages and meat products, both pork and beef, to the United States. They estimate an export rate of 200 tons per month. Meat would be sourced from throughout the country but primarily from the largest farms and slaughterhouses. The United States already imports milk products like cheese and ice cream from Lithuania.

Note: The site visit team was accompanied throughout by the Deputy Director for Animal Health, who often interjected answers to questions posed or prompted answers from other officials during discussions.

Visits to official veterinary services offices

Central SFVS Offices

The site visit team met with members of the central SFVS offices, including the Director of the SFVS, the Deputy Director for Animal Health, the Deputy Director for Veterinary Public Health, the Head of the Animal Health Department, the Director of the NVL, the

Chief of the Border and Transport State Veterinary Service (BTSVS), and three chiefs of county offices. Presentations were given by the Director and other officials regarding the structure of the veterinary services and the NVL (summarized below and presentations attached), followed by a question and answer session concerning financial resources, monitoring practices for the three diseases, and other topics.

1. Structure of the veterinary services

The official veterinary services are organized in a hierarchical structure (see graphic below). There are currently 83 employees (29 veterinarians) in the headquarters offices, up from 22 (13 veterinarians) in 1999. All staff at the central offices must speak English.



The central SFVS functions in developing and coordinating policy and issuing requirements and instructions for policy implementation. The county SFVS offices coordinate, control, and analyze district SFVS activities. The district SFVS offices coordinate, control, and analyze the activities performed by authorized private veterinarians and SFVS inspectors. There are internet and intranet connections between the central, county, and district SFVS offices, as well as the NVL and all of the BIPs.

The Information and IT Department of the central SFVS handles media relations, community relations, crisis communication, and manages events such as news conferences and symposiums. Complaints or feedback can be reported to the central SFVS via a hotline, mail, or the internet, by consumers, government organizations, or NGOs. Complaints or feedback received at the local SFVS level is transmitted to the central SFVS via fax or email. The SFVS has close ties with the national producer organizations and the farmers pay for some activities (voluntary testing).

Training is performed by the Continuing Training Centre and leading staff of the SFVS through a National Training Program approved by the SFVS. Training in EU laboratories and institutions occurs with assistance from PHARE or TAIEX, as well as bilateral assistance. Many official SFVS staff lecture at the only veterinary institute (in Kaunas). The NVL was accredited by the EU in 2000 and reaccredited in 2003. There are currently 9 county veterinary laboratories throughout the country.

Lithuania established the BTSVS in 1991 after independence from the Soviet Union and set up 18 BIPs. There are currently 12 BIPs that meet EU requirements, each with 5-6 veterinarians and 2-3 support personnel. The first was built at Medininkai in 2001 and opened in November 2002. Activities include conducting veterinary checks for import and transit, especially between Russia and the Kaliningrad oblast. Veterinary inspectors participated in workshops and seminars prior to accession, and were also sent to other EU countries for practical training. One of the 12 BIPs is closing because Belarus is closing their facilities.

2. Animal health status

Livestock census – In Lithuania in 2004 there were 1,019,035 (812,000) cattle; 1,061,000 (1,057,400) swine; 34,530 (16,900) sheep; 6,882 (27,200) goats; and 63,600 horses (significantly different numbers between presentations of the Director and the Deputy Director). There were an estimated 18,187 wild boar in 2003.

Disease status – Per the veterinary officials, there are currently no former OIE List A diseases present in Lithuania. Lithuania considers itself free from FMD since 1 January 1982, CSF-free with vaccination since 1 January 1993 and without vaccination since 1 July 2000, and END-free since 1989. There has never been a case of SVD recorded.

Cattle: Lithuania considers itself free from bovine TB and brucellosis. EBL is present at low prevalence. Sporadic cases of paratuberculosis, leptospirosis, campylobacteriosis, and BVD/MD (high serologic prevalence) occur. There is a high prevalence of IBR/IPV in the “production” herds, although the “breeding” herds are free. Occurrence of echinococcus is rare and trichinosis occurs sporadically. Figures on BSE surveillance, feed ban criteria, and estimated prevalence were given in the presentation.

Swine: Lithuania considers itself free from Aujeszky’s disease and has applied for free status from the EU. They also consider themselves free of porcine brucellosis, enterovirus encephalomyelitis, and TGE. There are sporadic cases of leptospirosis and atrophic rhinitis.

Sheep/goats: Lithuania considers itself free from ovine epididymitis, caprine and ovine brucellosis, CAEV, and scrapie. Maedi-Visna is present at low prevalence, and sporadic cases of contagious agalactia, ovine pulmonary adenomatosis, enzootic abortion of ewes, and salmonellosis occur.

Horses and poultry: Disease information was provided in the presentations.

Lithuania receives financing from the European Commission (EC) for control of bovine TB and brucellosis, EBL, Aujeszky’s disease, CSF, ovine and caprine brucellosis, and salmonellosis in pigs. Infectious disease control centers exist at the national, county and district levels.

3. Disease surveillance

Surveillance in domestic swine – Lithuania conducts surveillance for CSF, SVD, Aujeszky’s disease, TGE, and enterovirus encephalomyelitis. In 2003, there were 10,725 samples collected for CSF and SVD testing; 25,510 for Aujeszky’s disease; 10,725 for TGE; and 1,680 for enterovirus encephalomyelitis (maps of the geographic sampling

distribution were provided in the presentation). Target sample sizes and budget figures for sampling were provided.

Surveillance in wild boar – Lithuania conducts surveillance for CSF and trichinosis. There were 643 samples collected for CSF testing in 2003 and 414 so far in 2004. FMD testing calls for random sampling of wild boar and deer each year. There were 600 samples collected in 2003, and planning for 720 in 2004.

County/District SFVS offices – Alytus

Alytus County is in southern Lithuania, bordering both Belarus and Poland. It is divided into 4 districts; there are 3 district SFVS offices housed within the county office, and the fourth district is overseen by the county officials. Both county and district offices have the same structure and duties as at the national level, including animal health, food and feed inspection, animal welfare, animal identification, etc. The chief district veterinary officer coordinates groups of official and approved private veterinarians in each municipality.

There are 236 food-handling establishments under veterinary supervision in the county, including 1 livestock market, 1 dairy processing facility (meets EU standards), 6 slaughterhouses and 3 meat processing establishments (must comply with EU standards by May 2005), 2 feed manufacturers and 62 game dressing sites. The county contains 47,000 swine on 7,400 holdings (no swine herds over 1000 animals), as well as 52,500 cattle (27,800 dairy) on 17,500 holdings, 613 sheep, and 1,100 goats. There are also 1,220 wild boar.

The last cases of CSF in this region occurred on 3 farms in 1990. The last FMD case occurred on a cattle farm in 1964. In all cases the animals were destroyed. There have been no recorded outbreaks of SVD. The site visit team met with the chief of the Alytus County SFVS, as well as the chief of one of the district branches.

1. Administration and infrastructure

Administration – The county officials primarily perform coordination and supervisory activities. Since there is no district service in Alytus, the county officials perform those functions as well. This office supervises 6 veterinary inspectors: 3 food safety, 2 animal health, and 1 animal welfare. The inspectors supervise the approved private practitioners.

Resources – The physical structure appeared to be aging but sufficient to needs, although a more organized filing system would be beneficial. Most records were kept in paper form in binders or notebooks, and stored in boxes. Funding for county and district services comes through the central office, with some additional funding from the municipalities (e.g., for rabies vaccination).

Compliance and auditing – The district officer estimated only 0.2-0.3% noncompliance noted on farm visits. Punitive actions for violations can vary from a warning to stopping animal movement to a fine according to administrative law, and the official veterinary service can enforce. The district offices are audited once per quarter by the county and once per year by the central audit service.

2. Disease surveillance

The county receives the monitoring plan from the central SFVS. FMD sampling occurs in cattle, domestic swine, roe deer and wild boar. CSF sampling occurs in pigs and wild boar. SVD sampling occurs in domestic pigs. There are monitoring and control programs for CSF, SVD, Aujeszky's disease, and TGE. Eighty-three wild boar were tested for CSF and FMD in 2003, and 68 have been tested so far in 2004. Testing also occurs for trichinosis in wild boar, with 1-3 positive per year.

Sampling for CSF and SVD in domestic pigs is based on the estimated number of swine in each district (not risk factors). This county borders Belarus and may experience migration of wild boar but there is no increase in surveillance based on this possible risk. In 2003 samples were taken on randomly selected holdings – risk factors include size of holding (bigger is greater risk) and proximity with Belarus border – but in 2004 will be taken at slaughter as well. The sampling plan is designed to detect 5% disease prevalence at the county level with 95% confidence, assuming 100% sensitivity.

Surveillance in wild boar is also organized from the central level. Information is received from individual hunting units on the number of wild boar in different areas. Per the deputy, the average number of wild boar is consistent throughout Lithuania, so the sampling is distributed evenly. Veterinarians at dressing sites take samples for CSF, FMD and trichinosis. The official service inspects the dressing sites annually and the Committee on Environmental Sampling issues a license.

A team member asked why there was a discrepancy in the total number of wild boar estimated in Lithuania – 24,000 in one report versus 18,000 in another – and was told that “statistics lie” and that different people were likely responsible for the two estimates.

This county encompasses the Dzūkija National Park, which consists of 56,000 ha and has over 50 species of mammals, including 68 wild boar and 300 roe deer. The park is primarily pine forest (84% forest land) and not good habitat for wild boar. Three other areas in the county are protected from hunting. So far in 2004, county officials have sampled 19 wild boar for FMD and CSF, and 1 roe deer for FMD.

The district officials receive monthly reports on activities performed and diseases encountered from the approved private vets. These are passed to the county level and then on to the central level. The official veterinarians could not recall sending samples for testing on suspicion of contagious disease.

3. Animal identification

There are separate identification systems for ruminants (cattle, sheep, goats) and swine. For ruminants, owners supply information regarding births to the private veterinarian, who informs the local veterinary officials, who inform the ear-tag supplier. Passports are issued for newborn animals and those exported. For swine, the owner or veterinarian completes a form and sends it to the local officials, who enter the information into a central database and pass it on to the suppliers, who deliver the ear-tags to the district veterinary pharmacy. A copy of the health certificate issued for animal movement goes to the local SFVS and the slaughterhouse, and the information is entered into the central database.

Animal owners or keepers must keep an inventory of animals as well and enter information on animal movement. Herd registry is done by owner/keeper and one

owner/keeper may have multiple herds. Lithuania is not yet ready to put herd codes in a database (there was an unsuccessful herd code project funded by the EU PHARE program). They currently have 3 different bovine identification systems – holding, keeping place, and herd – but are moving towards a single system based on herd. Every year the district officials arrange verification on 10% of farms (for each species) and confirm that the information in the central database matches the farm register and the actual situation. Registration numbers are necessary for payment of subsidies.

4. Movement control

A health certificate is required for any animal movement – internal, trade, or export. Internal health certificates can be signed by private veterinarians. Purchasers cannot register an animal without a health certificate. When animals go to slaughter, one copy of the health certificate goes to the district veterinary services and another goes with the animal to the slaughterhouse. The veterinary supervisor at the slaughterhouse enters the animal ID numbers into the central database for confirmation of slaughter.

5. Approved private veterinarians

All veterinarians must have a license to practice. They receive recommendations from district officers and others to become approved veterinarians. Each submits an application for approval to perform certain tasks in a specific territory. There are 39 approved (contracted) private veterinarians in this county, of which 36 are general practice and 3 are for pets only.

6. Training

Approved private veterinarians attend obligatory training at the national training center and pass certain tests annually. One of the focuses of this training is recognition of infectious animal diseases, including CSF and FMD; the deputy indicated that recognition is a concern, since Lithuania has not had List A diseases for many years. Veterinarians are approved for 1 year and must report monthly on their activities. No simulation activities have been performed in the county since the chief assumed his post 1 year ago.

County officials receive training from the central offices, and pass the knowledge on to the district officials. Recent training included a 1-day national simulation for HPAI in October 2004.

7. Emergency response and compensation

Emergency response – If CSF is suspected in domestic pigs, the district chief stated that he would stop all movement, notify central headquarters, and (with prompting) follow the contingency plan (contingency plans for CSF, SVD, and FMD were shown) and other pertinent legal acts. He cited EC Directive 2001/89, which indicates what actions should be taken. If CSF was confirmed in wild boar, the district chief (with prompting) said that he would notify the CVO (would already know there was a suspect case), who would give detailed instructions.

Public awareness – The awareness of the public of disease issues is raised through the approved private veterinarians and the local mass media.

Compensation – The regulations specify a list of diseases eligible for compensation. This list contains more diseases than are present on the EC list. Compensation at market value would be paid 50% by the EC and 50% by Lithuania; the country has reserve funds in case of an outbreak.

Animal owners must notify of the disease in order to receive compensation. The veterinary officials must effect a standstill, notify the EC, take samples, coordinate an expert group, and perform other tasks in the contingency plan in order to receive compensation money from the EC. Per the deputy, farmers willingly notify of suspected diseases because they know that they will be compensated and also know that they will eventually be found out if they do not.

8. Miscellaneous

Veterinary inspectors at slaughterhouses are official veterinarians under contract with an individual slaughterhouse. They do not currently directly belong to the district veterinary service but will in 2005.

Waste control – Waste feeding is prohibited except for heat-treated waste to animals for “own” use. Compliance is monitored by the district veterinary officials. Official veterinarians check individual holdings and farmers who sell for export or trade must have a register of what has been fed. Per the deputy, swill feeding is still a problem on small farms.

County/District SFVS offices – Kaunas

This is the only county in Lithuania with no international borders. It is 8000 sq km, with 466,500 ha of agricultural land, 223,600 ha of forest, and 760,000 people. The county is divided into 6 districts including 2 cities. Each district has 3 departments: market supervision, veterinary and public health, and animal welfare and identification. The five district offices have an identical structure; however, there is no separate district service for Kaunas, so the county officials perform the district functions.

This county contains 118 private veterinarians. There are 116,000 pigs on 3,000 holdings. Ninety thousand pigs are on farms ranging in size from 2,000 to 25,000 head. There are also 142,000 cattle and 6,000 milking cows. The site visit team met with the county chief and his deputy, as well as the heads of the different departments.

1. Disease surveillance

Contagious disease testing is carried out on the order of the central SFVS office. The central office asks the counties for a list of “higher risk” farms (primarily based on animal density), including the number of herds and number of pigs per herd, and then formulates the order. Funding is obtained from the Ministry of Agriculture.

In 2003, the county submitted 1,060 samples for CSF and SVD, 3,070 samples for Aujeszky’s disease, and 1,070 samples for TGE. Seventeen of the largest farms with 90,000 of the total 115,000 pigs in the region, ranging in size from 2,000 – 25,000 swine, participated in the testing. In 2004, they will be adding some small farms to the CSF/SVD monitoring process.

Per the deputy, district officials sample 60 animals per farm for CSF and SVD to achieved 95% confidence and more for Aujusky's to achieve 99.5% confidence. Sample sizes are calculated using freeware (WinEpiscope) that uses population size, number of diseased animals expected, and desired confidence level, but does not account for test sensitivity or specificity.

Samples are taken from wild boar by private veterinarians during hunting – many hunters are veterinarians. Samples include blood, tonsils, and internal organs. No samples were taken from fallen animals in 2004. There have been no suspicions of CSF, SVD or FMD in any species.

Samples for FMD testing are taken from boars at semen collection centers. The order from the central office calls for 72 samples per county per year. The number is higher than for CSF or SVD because the NVL has asked for more. The government gives additional funding for testing above the required number of animals.

2. Animal identification

Lithuania has 37 separate legal acts pertaining to animal identification. An identification program for cattle started in 1999, for sheep and goats in 2001, and for swine in April 2004. These programs enable identification and registration of animals, registration of animal keepers, and control of animal movement. The swine system consists of herd identification rather than individual identification. Each herd receives an 11-digit identification number consisting of a 1-digit species code, a 4-digit area code, and a 6-digit unique identification number. Swine are only identified if they leave the holding, using button tags (valuable/breeding animals) or a tattoo (most common).

Animal owners are required to inform within 7 days of an event (birth, sale, death, etc). A form specific for this purpose can be filled out by a private veterinarian, an agricultural specialist, a veterinary assistant, or the farmer if he/she has had special training to fill out the form and put the tag in. The form goes to the district office, where the animal identification staff enters the data into a computer database, which connects to the governmental Rural Information Center. Tags for ruminants have barcodes and are delivered to the district office, whereas orders for pig tags are placed by email and the manufacturer provides the tags directly to the farm. If a tag is lost the animal owner can apply for an identical replacement tag.

3. Movement control

This county does not export swine, all are sent to slaughter. However, there have been exports of calves to Spain, Germany, and France from dealer premises (not collection points, per the deputy). They also send horses to Italy – there are 4 quarantine stations.

TRACES is operational and each county has one person dedicated to using the system. The information contained in TRACES includes (1) general information on the shipper and receiver (certificate number, competent authority, species, date issued, etc); (2) trading company; (3) place of loading and unloading; (4) information on the consignment (species, number of animals); (5) transportation method, time, date, vehicle type, date and time of departure, trip duration, person driving; and (6) route plan, including transit staging points.

4. Emergency response

Emergency response – The county officials would follow the contingency plan and other orders from the central office. The contingency plan is regularly updated and includes emergency committees in each county which involve the police and other civil services. If CSF were detected in a slaughterhouse, slaughter would be stopped, animal and carcass movements would be stopped, and the veterinary inspector would notify the local SFVS office. All EU-approved slaughterhouses (6 in this county) have emergency cold storage reserves; if CSF is confirmed then carcasses and animals on the premises would be destroyed. Suspicious animals would be traced and movement stopped at the farm of origin.

Public awareness – Public awareness of diseases and outbreaks is accomplished through the county website, media contacts (TV, radio), and the participation of the chief county and district officers in municipal council meetings.

5. Miscellaneous

Training – County and district officials participated in national simulations for FMD in 2002, CSF and 2003, and HPAI in 2004.

Waste feeding – Small farms are inspected once per year, large farms are inspected twice per year. In addition, approved veterinarians must fill out a form that describes feeding practices (among other things) whenever they are on a farm for testing. No instances of noncompliance with the waste feeding ban have been noted.

Visits to border inspection points

The highest volume of border traffic comes through the seaports in the Klaipeda region and the road and rail ports from the Kaliningrad region. The Lavoriskes road port is temporarily closed because the border port on the Belarus side closed.

Medininkai road port

This is a road BIP on the border with Belarus. It was built to EC specifications and was the first EC-approved BIP to open (in 2001). Medininkai is fully approved for inspection of all animals and animal products (only fully approved port). This BIP is staffed by 5 veterinarians and 3 support personnel and is open 24 hours, 7 days per week. It receives primarily shipments of treated hides and skin (129 tons), horns and bones for buttons, wool (15 tons), and fish products/crabmeat. Sixty-seven horses have entered through this port since accession, 44 destined for Italy, 20 for Lithuania, and 3 temporarily imported for competition.

The site visit team met with the chief border inspection officer and several other veterinary inspectors. The border chief gave an overview of the BIP and then answered questions. The site visit team also received a tour of the facilities.

1. Infrastructure

Physical facilities – The facilities were modern and built to EU specifications. There were separate facilities for unloading, inspection and holding of ungulates and other animals, as well as product for human consumption and not for human consumption. There are also storage facilities for chilled, frozen and ambient temperature products.

2. Biosecurity

Employees must pass through a clean room to enter any inspection sector of the facilities, and must shower and change fully on entry and exit. There are not general biosecurity/disinfection practices for trucks entering or leaving Lithuania in the absence of an outbreak. In an outbreak situation they would use disinfection mats and sprays. Lithuania gets disease information from the OIE and the EC, and from daily CVO-CVO contact with other Baltic States.

3. Import and transit controls

Import controls – The border port receives information on a shipment prior to arrival (required). The information is entered into a central database. On arrival, the shipment undergoes a document check (customs declaration, certified health papers, and fees), an identity check, and a physical check with samples taken if needed. Samples are delivered by car to the laboratory, and control samples are kept at the BIP.

The document check consists of verifying the appropriate stamps and signatures, examination of health certificates (live animals and products), and required lab results. Documents are sent prior via fax or email and the original presented on arrival at the border. Countries must be approved for import but there are no regulations for approval of individual premises. Lithuania follows the EC regulations with regard to allowable entry. Livestock shipments must follow an approved route plan to the destination.

All shipments are subject to 100% document control and 100% identity control. The physical check depends on the product but is 100% if there is suspicion of disease. Category I products like beef and pork meat and casings are 20% inspected. Category II products like eggs, poultry meat, milk for human consumption, animal proteins, and game meat are 50% inspected. Category III products like semen, embryos, dairy products, gelatin, hides, bones, horns, blood products and skins are 1-10% inspected. If a product is rejected the owner most often wants it back to resell within the country.

Quarantine – Horses must be kept for 3 months on one premises and isolated for 30 days prior to export by EC regulations. There is no requirement for quarantine after entry. Live swine and cattle are quarantined at the destination for 30 days at a previously approved facility. They are checked once per week by an approved veterinarian and after 3 weeks are eligible for any additional required testing.

Transit controls – Seals are applied at the point of origin in third countries. The Belarus officials can break the seal, inspect, and reseal. A customs officer records the seal number and breaks the seal upon arrival at Medininkai. A veterinary inspection seal and a customs seal are applied for transit.

Upon arrival at Medininkai, information on a shipment in transit is passed immediately to the point of departure, which gets ready to receive the shipment. Confirmation is sent from the point of exit to the point of entry when the vehicle leaves the country. The computerized database allows trace-back of all movements. The TRACES system is fully functional although sometimes slow; all BIPs are on TRACES.

4. Veterinary control of passenger traffic

Inspection of passenger traffic is primarily under the control of the Customs Service. No animal products can be brought in from third countries except certain products up to 1 kg per person and special food for children. Ham is not allowed in at all. The site visit team requested information on the percentage of passenger luggage inspected, confiscation rates, commodities seized, and veterinary controls at non-approved border crossings. No data was immediately available – the SFVS is requesting this information from the Customs Service.

5. Training

The border veterinarians received 2 weeks of intensive training at other sites in the EU prior to accession, and also hosted foreign inspectors for approximately 1 month after accession. Border veterinarians attend annual 3 day training at the veterinary academy, where they learn about new legal acts and fulfill other requirements for public service. They also have the opportunity to take other courses such as computer programming or English.

6. Emergency response

If an infectious animal disease was suspected, the border chief said that he would notify the central SFVS offices, record the occurrence, take samples (results ready within 24 hours), implement proper biosecurity precautions, kill the animal, and send the carcass to a rendering plant for incineration. On further prompting he stated that he would follow the contingency plan, stop all movement, and establish a crisis center in cooperation with customs officers and border guards. The border chief has the authority to stop movement, but would wait for decision from central authority for further action.

7. Miscellaneous

Surveillance – It is required by law that veterinary inspection of hunted wild boar occur at a collection point. The offal is disposed of at this point. The veterinarian collects samples and there is a small payment for each sample. The requirement is for 60 samples per county; the counties are meeting this requirement but could do more. Vaccine titers and BVD-MD interfere with CSF surveillance. FMD surveillance occurs in cattle, farmed reindeer, and wild boar. The sampling plan is designed for 95% confidence at the county level, but not at the district or herd level.

Slaughter – Slaughterhouses are divided into categories by size, large and small, as well as EU-approved or not. However, the same level of veterinary inspection is provided at all slaughterhouses. There are no official collection or assembly points at present, although dealers can collect.

Vilnius airport

This BIP was constructed in 2003 and is EU-approved for veterinary inspection of small animals, products for human consumption, and products not for human consumption. It is the only approved airport in the Baltic States (Lithuania, Latvia and Estonia). Three veterinary inspectors and one supervisory veterinarian work here. The BIP is open 24 hours, 7 days, with at least 1 veterinarian and 1 support staff on duty.

Less than 500 consignments per year are received and the same facility is used for all types of products, with disinfection in between. In 2004, 240 consignments of animal products were received from third countries, primarily exotic animals, ornamental fish, reptiles, and bovine semen. Consignments were received from the Netherlands, China, the United States, Moscow, Kiev, Israel, and Turkey. One consignment (of caviar) has been rejected since 1 January 2004.

1. Import controls

The BIP receives information 24 hours prior to the arrival of a consignment from a third country. This indicates the consigner and consignee, as well as the destination. The BIP thus has 24 hours to check compliance with the legal acts and documentation requirements.

Most consignments from third countries pass through Frankfurt or another EU BIP first. Document control, ID control, and physical control are performed at the point of entry into the EU. No checks are done here on cargos of EU origin other than customs officers confirming that a common veterinary entrance certificate accompanies the consignment. There are direct flights from Moscow, Kiev, Turkey, and Israel.

Catering waste – Lithuania Airlines is responsible for catering and produces the food on site at the airport. There are no direct international flights to Vilnius airport, only European airlines and Lithuanian airlines. A private, joint-stock company collects the waste with no special biosecurity. Per the deputy, catering material is officially Category I material under EC regulations and must be destroyed. No special biosecurity measures are followed.

2. Movement controls

All BIPs are connected to TRACES as well as a German system called COACH that is like TRACES but allows for more statistics. TRACES is fully operational and meets EU requirements, but they say that it is sometimes too slow. TRACES is used to track movement across Member State borders within the EU. The COACH system is used to track movement of international products once they enter Lithuania and connects BIPs, warehouses, farms, etc. There is also a computerized system to track entirely internal movement using health certificates and animal identification.

3. Audits and compliance

The BIP is inspected by the Lithuanian government twice per year per EC directives. Each time the supervisory veterinarian is required to write an improvement plan detailing how to improve communication, training, etc. A border inspector who is not doing his/her job is penalized and a special investigation initiated.

Noncompliance with import restrictions is minimal; among the 240 consignments, there was no non-compliance other than a shipment of caviar returned to Russia.

4. Veterinary control of passenger traffic

Passenger inspection is carried out by the Customs Service. No personal items have been seized since accession; prior they had seized 5 kg of Chinese dried mushrooms, which were destroyed by incineration.

Visits to animal farms

Beef cattle operation – Kedainiai district

This farm has been in private operation since 1998. There are 2 holdings on 500 hectares of land – a main holding and a second recently purchased that was formerly a collective dairy farm. The farm has 120 head of Limousin cattle, with a few Lithuanian black-and-white. An official veterinarian visits the farm frequently to check animal ID and animal welfare compliance. The farm owner received some literature on FMD in 2002. Most animals are sold for breeding or trade with Estonia. The site visit team met with the farm owner and the approved private veterinarian who attends the farm. County and district officials were also present.

Biosecurity – The compound is open (not fenced). Visitors put on disposable booties, coats, and hairnets, and passed over a disinfection mat on entry and exit.

Animal identification – The owner notifies the private veterinarian of any births, who receives the tags and put them in. The owner pays for the identification now but did not in the first 2 years of the program. Each animal had two identical bangle tags, one in each ear.

Animal movement – If the owner wished to send cattle to a slaughterhouse, he would apply to the private veterinarian, who would inspect the cattle and issue a health certificate.

Emergency response – If the private veterinarian suspected a contagious animal disease, he would affect a standstill and notify the district officials, the neighboring veterinarians, and a crisis center would be formed.

Dairy cattle operation – Sakiai district

This is one of the largest dairy farms in Lithuania with 110 employees and 1770 cattle: 560 milking cows, over 1000 heifers, and 130 bulls (used for beef, not clean up). The milking herd is currently 50% Holstein (30% of the overall herd) and 50% Lithuanian black-and-white (Holsteinized). The farm has 4200 hectares of land and grows rapeseed, wheat, and sugar beets. A new barn for 630 animals was built last year that will help them to increase the number of milking cows to 1000. The site visit team met with the owner and the general manager (an approved veterinarian).

General operations – This farm feeds corn silage, concentrated feeds, and hay from the crops produced on farm (some rapeseed and compound feeds are bought). Feed is mixed on farm. Only artificial insemination is used. The milking average is 8,040 kg (8,179 kg for the Holsteins and 7,800 kg for the Lithuanian black-and-white) with 4.2% milk fat and 3.58% protein. There are two grades of milk sold to the dairy processing center, quality and non-quality. They have a circular milking parlor. The private veterinarian visits regularly, and the district veterinarians come often to inspect and provide training.

Biosecurity – The compound is fenced and no unauthorized persons are permitted access. Employees must change clothing and boots on entry and exit, and pass through

disinfection mats. Animals purchased from other countries are given separate housing (isolated) and attended by separate staff for one month. They are examined by an official veterinarian and any required testing is performed at that time.

Disease surveillance/monitoring – Five FMD samples per year are collected from this herd and there is quarterly monitoring for residues. If the private veterinarian encountered nervous signs, he would isolate the animal, inform the district officials, and (per the deputy) monitor for 14 days to see if the nervous signs persist.

Animal identification – Cattle are given two ear-tags at birth. The private veterinarian fills out the appropriate form and submits it to the district office. Animals that are sold receive passports.

Large swine operation – Sakiai district

This operation has 26,500 pigs: 16,000 sows, 12,000-13,000 fattening pigs, and the rest suckling or weanling pigs. These are primarily Danish breeds – Landrace, Yorkshire, and Duroc. The operation started in 1978 as a Soviet collective farm. After Lithuania gained its independence, the farm was restructured. They anticipate an eventual capacity of 40,000 pigs. There are currently 40 staff including 2 veterinarians and 3 technical support staff. The site visit team met with the deputy general of the commercial sector and one of the veterinarians working full-time for the company, as well as the district veterinary official.

General operations – Ninety percent of feeds are prepared on site from grain from neighboring farms. Small piglets receive readymade feeds. Protein feeds are primarily soy meal and fish meal. Only artificial insemination is used; some semen is collected from boars on site and some is brought in from outside. Conception rate is 84-90% with average production of 22.3 piglets/sow/year. Animal health records are not computerized – a clipboard with treatment and withdrawal information is hung from the sow crates as needed. Swine are sold to various slaughterhouses and also traded to Latvia.

Biosecurity – The facility is fenced and unauthorized persons are denied access. There is a guard station at the front entrance. The staff cannot keep pigs at home. There are disinfecting foot baths throughout and strict pest control. The production area is separated and only 42 people have access. There is a clean area and a dirty area, and people must shower and change clothes completely between (shower-in, shower-out).

Disease surveillance/monitoring – This herd participates in monitoring programs for SVD, FMD, CSF, Aujeszky's disease, swine brucellosis, TGS, and leptospirosis. All different age groups are sampled. Twenty samples for FMD were collected in 2003, and 187 samples have been collected for CSF so far in 2004 (monthly monitoring). There is also a residue testing program at slaughter.

Animal identification – Piglets are counted within one day of birth and an internal number is given by tattoo when they are moved to another sector. Breeding animals receive ear tags. All animals receive a tattoo prior to movement off of the farm.

Animal movement – For movement to slaughter, one of the company veterinarians signs an internal health certificate. For trade to Latvia, fattening pigs are selected 24 hours in advance, identified by herd number (tattoo or ear tag) and the SFVS issues a certificate.

Emergency response – If the district veterinary official suspected CSF, the contingency plan would be applied and samples sent to the NVL. Per the official, the main clinical sign would be a drop in production.

Small swine operation – Alytus district

A small swine operation was not visited due to time constraints.

Visits to diagnostic laboratories

National Veterinary Laboratory

Dr. Jonas Milnius, Director of the NVL, gave a short presentation describing the structure and function of the laboratory. The function of NVL involves animal disease diagnosis and food safety.

The site visit focused on 3 departments: 1) Serology, 2) Virology, and 3) Molecular Biology. In addition, the sample tracking and results reporting activities of the laboratory were evaluated.

1. Laboratory infrastructure

Within NVL there are 10 departments:

1. Department of Food Microbiology
2. Department of Diagnostic Bacteriology
3. Department of Serology
4. Department of Economy
5. Department of Pathological Anatomy & Histology
6. Department of Chemistry
7. Department of Radiology
8. Department of Virology
9. Department of Molecular Biology
10. Department of Sensory Evaluation

NVL employs a total of 120 people. All testing for OIE List A diseases is carried out at the NVL. In addition, 5 branch and 6 regional laboratories employ another 75 people. The branch and regional laboratories conduct bacteriologic, serologic, and anatomic pathologic examination for domestic diseases.

2. Laboratory accreditation

In 2004, NVL applied for ISO 17025 accreditation for the following OIE List A diseases:

1. ELISA for detection of antibody of FMDV (Ceditest 3ABC competitive ELISA); SOP 5.4.S.8.

2. ELISA for detection of antibody to swine vesicular disease (competitive ELISA utilizing MAb SVDV UK-22); SOP 5.4.S.9.
3. ELISA for detection of antibody to classical swine fever (Ceditest); SOP 5.4.S.10.
4. ELISA for detection of antigen of classical swine fever (Bommeli); SOP 5.4.V.3.
5. Direct fluorescent antibody test (DFAT) for detection of classical swine fever virus antigen (Ceditest); SOP 5.4.V.7.
6. Immunoperoxidase test (IPT) for detection of classical swine fever virus antigen (Ceditest); SOP 5.4.V.8.
7. Virus neutralization test for detection of antibodies against CSFV or BVDV; SOP 5.4.V.9.
8. Detection of classical swine fever virus by RT-PCR; SOP 5.4.G.5.

3. Serology Department

The Serology Department has a staff of 9 persons: 1 department head, 4 veterinarians, 3 technicians, and 1 support person. The department tests approximately 200,000 serum specimens per year. Private veterinarians are contracted by the official veterinary services to collect and submit specimens. Following testing, specimens that give negative results are disposed of immediately after results are reported, while specimens that test positive are retained for 1 month after results have been reported.

A surveillance plan for the number of serum specimens to be collected per week from 10 different regions for CSF, FMD, and Aujeszky's disease was presented.

Region	Number of Animals
Alytaus	150-200 mėginių
Kauno	450-500 mėginių
Klaipėdos	300-350 mėginių
Marijampolės	350-400 mėginių
Panevėžio	550-600 mėginių
Šiauliai	550-600 mėginių
Tauragės	350-400 mėginių
Telšiai	200-250 mėginių
Utenos	150-200 mėginių
Vilnius	300-350 mėginių

FMD antibody ELISA: external control sera are obtained from the FMD World Reference Laboratory in Pirbright, UK. In addition to the control sera that are provided with each kit, internal control sera are routinely included in each test run.

CSF antibody ELISA: So far in 2004, 21 sera have given a suspicious reaction by ELISA. These have been forwarded to the Virology Department for confirmatory testing by CSFV and BVDV neutralization test. Final results were not available at time of visit.

4. Virology Department

The Virology Department has a staff of 10 persons: 1 department head, 4 veterinarians, 1 technician, 1 support person, and 2 affiliated staff in sample receiving. This department

carries out the CSFV antigen ELISA, the DFAT and IPT on frozen organ sections, and the CSFV and BVDV neutralization test. The questionable quality of the FITC conjugate used for the DFAT was discussed. Positive control sections were obtained from the EU Reference Laboratory in Hannover.

The laboratories involved in the CSFV/BVDV neutralization assay were very well organized. Cell culture and virus areas had separate entrances and were connected by a pass-through box. The neutralization test was done under level 2+ conditions – this involved putting on a disposable gown and booties when working with virus. Virus strains and control anti-sera used in the test were obtained from the EU Reference Laboratory, Institute of Virology, Hannover, Germany. There are two criticisms regarding the virus neutralization tests for CSFV. The first is the lack of a quality control program that periodically tests for pestivirus contamination of the cell lines used in these assays (PK-15, SFT-R, and MDBK). Fetal bovine serum is however tested for the presence of antibodies to pestiviruses and the cell lines were originally certified as pestivirus free (refer to certificates). The second is a lack of an uninfected serum control well which would be useful in identifying serum toxicity or non-specific staining.

A total of 200 CSFV antigen ELISAs (100 test submissions + 100 QA samples) and 200 CSFV neutralization assays have been carried out to date in 2004.

In 2005 the Virology Department will move to newly renovated facilities which will include BSL3 with directional air flow, HEPA filtered exhaust air, disinfection of waste water, and a shower-out policy.

5. Molecular Biology Department

This department was established in 2002 mainly to detect genetically modified organisms. The existing facilities are very well laid out with respect to work flow and are well equipped. This department will also move to newly renovated space (150 m²) in 2005. Equipment includes dedicated laminar flow hoods equipped with UV lamps for nucleic acid extraction and master mix preparation (pre-PCR steps), conventional thermal cyclers and a real-time thermal cycler (ABI 7900HT Sequence Detection System). A capillary DNA sequencer has also been purchased and will be installed in the new facility when it is completed. This will enable the laboratory to carry out genotyping of CSFV isolates as well as discriminatory capabilities for other pestiviruses. RT-PCR for CSFV is available for use in suspect cases. There are also plans to implement real-time RT-PCR for CSF. This department participates in the annual inter-laboratory comparison test organized by the EU Reference Laboratory for CSF.

6. Sample tracking

There are 2 sample receiving areas at the NVL. The first deals with submissions concerning food safety in which specimens are logged in and tracked using a LIMS. The second area deals with animal health/disease control submissions. This does not have its own LIMS yet but plans are in place to establish one. These submissions are tracked by paper. Each submission is assigned to a single department, e.g., Serology. If confirmatory testing is required and has to be done in another department (e.g., Virology), it is the responsibility of the originating department to track the progress of testing and to include the confirmatory results on the final report.

7. Reporting of positive test results

Results are reported centrally to the Animal Health Department of SFVS as well as to the District Veterinary Officer of the county of origin, and the private veterinarian who submitted the sample(s)

Laboratory strengths:

1. ISO 17025 accredited
2. Recently and newly renovated laboratories
3. Modern high-tech equipment purchased within the last 5 years
4. Participation in Inter-Laboratory Comparison testing for CSF
5. BSL-3 containment space should be available within the next 12 months (renovations in progress) – work with CSFV will switch from BSL-2 to BSL-3

Laboratory weaknesses:

1. Limited diagnostic capabilities for FMD – reliance on serology – antibodies to non-structural proteins (3ABC). No tests for FMDV antigen detection. Antigen/virus detection reliant on World Reference Laboratory for FMD. This could significantly delay the reporting of an outbreak of FMD.
2. Limited diagnostic capabilities for SVD (serology)
3. Screening test for CSFV is E^{rns} ELISA (Bomelli). This is not a very sensitive test when compared with virus isolation. It is satisfactory at the herd level but not at the individual animal level. Usefulness of this test as a surveillance tool is very much dependent on sampling design. Also use DFAT (Ceditest conjugate). In the experience of FADDL and NCFAD, this conjugate gives weak signals on positive frozen organ sections and is therefore of questionable usefulness for surveillance purposes.
4. No suspect cases for CSF – this raises the concern of whether veterinarians in the field are capable of recognizing pigs with signs suspicious of CSF

Miscellaneous – Biovela meat tasting

The EU-approved factory produces dried beef and pork products (cured for 6 months) and exports to Ireland, the UK, Poland, Latvia, Estonia, and Russia. Seventy percent of the products are mixed beef/pork and 30% are pure beef or pork. The casings for the sausages come from Austria and an EC-approved plant in Vilnius that receives some raw materials from Germany. The plant also produces some cooked pork products (e.g., cooked for 4 minutes at 100 C and then smoked).